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Abstract

According to the present invention, there is provided a solid-state laser diode comprising:

- a laser diode for exciting a solid laser medium;
- a constant current source for supplying a constant current to the laser diode;

voltage measurement means for measuring a voltage at both ends of the laser diode; and

abnormality detection means for detecting an abnormality at the laser diode based on an output of the voltage measurement means. Whereby a photodiode need not be arranged on the periphery of the solid laser medium and the laser diode, and an abnormality at the laser diode can be detected without increasing the size of the device and complicating the device and without deteriorating the laser emission efficiency.